



What Should You Expect from the

SSI How-To-Handbook

A Detailed Outline

Information Memo #2:

July 8th, 2005

*Indiana Department of Workforce Development
Indiana Business Research Center
Workforce Associates, Inc.*



Chapter I. Introduction

Chapter II. The Strategic Skills Initiative: Logic and Objectives

Chapter III. Definitions

Chapter IV. Basic SSI Methodology

Section 4.01 Data

(a) Secondary Data

(i) Various Types of Secondary Data: Their Strengths & Weaknesses

1) The “Literature”

- a) Previous Studies of the Local Economy &/or Workforce*
- b) Articles (Newspapers, Journals, etc.)*

2) Statistical Data

(ii) Where to Find Them

1) The SSI Data Packet

2) Other Sources

a) LMI Data

- i) Classification Systems*
- ii) Types of LMI Data*
- iii) Indiana’s LMI*
- iv) U.S. Bureau of Labor Statistics*

b) Census Data

c) U.S. Department of Commerce & other Federal sources

d) Chicago Federal Reserve Bank

(iii) What to Do With Them

1) Downloading and Storing the Data

2) Analyzing the Data & Making Sense of Them

3) Presenting the Data So Others Can Understand Them

(b) Primary Data

(i) Types and Sources of Primary Data

1) Surveys

2) Interviews



- 3) *Focus Groups*

(ii) How To Do Them

- 1) *Surveys*
- 2) *Interviews*
- 3) *Focus Groups*

Section 4.02 The Synthesis: Bringing it All Together

Section 4.03 Regional Coalition and Industry Partner Engagement

Section 4.04 Producing the Report

- (a) The Outline
- (b) First Draft
- (c) Feedback and Validation
- (d) Final Draft

Chapter V. Report #1: Occupation and Skill Shortages Report

Section 5.01 Selecting Key Industries and/or Industry Clusters

- (a) Nine Basic Questions:

- 1) *Which industries in this area employ the greatest number of workers?*
- 2) *Which industries pay the best?*
- 3) *Which industries have been growing the fastest, in jobs? In numbers of establishments? In average weekly wages?*
- 4) *Which industries will be offering the greatest number of new jobs in the next few years?*
- 5) *In which of our industries do we now have the greatest comparative advantage?*
- 6) *Which industries seem to building stronger strong competitive advantage for the future?*
- 7) *Which of our industries are positioned to capitalize on regional, national and/or global growth trends?*
- 8) *Which industries have been targeted by state and /or local economic development experts for future growth?*
- 9) *Who are the region's specific employers by six-digit NAICS industry code? How many workers do they employ? What are their annual sales? Where are they located? Who is an appropriate person to contact at that firm?*

- (b) Addressing These Nine Questions:

- (i) **Mining The Literature**
- (ii) **Mobilizing and Analyzing Secondary Data**



- 1) *Getting the data*
- 2) *Tools of Analysis:*
 - a) *Location Quotient Analysis*
 - b) *Shift-Share Analysis*

(iii) Developing and Sifting Primary Data

Section 5.02 Selecting the Critical Occupations and Skill Sets

(a) The Basic Question:

- (i) Which occupations and skill sets are “critical” (i.e., most important) for the key industries (or clusters) identified in the preceding analysis?**

- 1) *Which occupations account for the most workers in these industries (or clusters)?*
- 2) *Which occupations are really, really important, i.e., critical to the competitiveness of the industries (or clusters)?*
- 3) *Which skill sets are common to these occupations? Which are unique?*
- 4) *Which occupations and/or skill sets are of “emerging” importance?*

(b) Addressing This Basic Question:

- (i) Mining The Literature**
- (ii) Mobilizing and Analyzing Secondary Data**
- (iii) Developing and Sifting Primary Data**

Section 5.03 Estimating Occupational Shortages

(a) Demand Side Analysis

(i) The Basic Questions:

- 1) *What is the projected employment growth for the critical occupations, both in the key industries and in total?*
- 2) *To which factors is the demand for workers in these occupations most sensitive? How likely are significant changes in those factors?*
- 3) *How easy or difficult is it for employers to find acceptable substitutes for local workers in these occupations (e.g., through technology, outsourcing, offshoring, etc.)?*

(ii) Addressing These Basic Questions:

- 1) *Mining The Literature*
- 2) *Mobilizing and Analyzing Secondary Data*
- 3) *Developing and Sifting Primary Data*

(b) Supply Side Analysis

(i) The Basic Questions



- 1) *How many workers in the area now possess the qualifications necessary to fill jobs in the critical occupations that have been identified?*
- 2) *What is the present employment status of these workers?*
- 3) *What is the demographic profile of those workers?*
- 4) *What are the future prospects for persons in this EGR that fit that demographic profile?*
- 5) *How easy or difficult is it for workers to enter these critical occupations and/or to acquire these skills? What are the principal barriers to entry into these critical occupations?*
- 6) *What specific licenses, certifications or other formal requisites are necessary for entry into and continued practice in the critical occupations? Who determines these requisites? Are these requisites changing? If so, then how?*
- 7) *What education/training, skills, and knowledge will be needed in these critical occupations?*
- 8) *What is the present and anticipated future “output” of education and training institutions that prepare entrants into the critical occupations?*
- 9) *How geographically and occupationally mobile are workers in these occupations and with these skills?*

(c) What's the Gap and So What? Bringing Demand and Supply Together

- (i) **Which critical occupations and/or skill sets in which industries are estimated now to be in shortage and in what quantity? Geographically, where are those shortages?**
- (ii) **Which critical occupations and/or skill sets in which industries are projected to be in future shortage if labor market and workplace conditions remain as they are now (or as they are anticipated to be)? and in what quantity? To the extent possible, provide details by:**

- 1) *Two years and ten years in the future.*
- 2) *By county or other relevant sub-region within the EGR.*
- 3) *By industry or cluster.*
- 4) *By specific employer.*
- 5) *By degree of sensitivity to outside factors (market conditions; the national economy, etc.*

- (iii) **So what? What is the likely impact of these shortages on the competitiveness of the key industries or clusters?**

- 1) *What is the evidence for this conclusion?*
 - a) *Industry partners (i.e. private industry, local economic development officials)*
 - b) *Other knowledgeable sources.*

- (iv) **Do these critical occupations in scarcity provide good incomes to workers in this EGR?**

- 1) *What are the compensation levels and trends thereof for critical occupations in Indiana and its regions*
- 2) *What have been the recent trends in these compensation levels?*



- 3) *How do the compensation levels in this EGR compare to what prevails elsewhere in the Midwest and the nation?*
- 4) *How do these compensation levels compare to the self sufficiency standards in this EGR?*

(v) Addressing These Basic Questions:

- 1) *Mining The Literature*
- 2) *Mobilizing and Analyzing Secondary Data*
- 3) *Developing and Sifting Primary Data*

Section 5.04 Writing the Report

- (a) Synthesizing the Research Results.
- (b) Validating Those Results
- (c) Outlining the Report
- (d) The First Draft
- (e) Feedback and Consortium Endorsement
- (f) The Final Draft and its Submission

Chapter VI. Report #2: The Root Causes Report

Section 6.01 The Nature of This Report: Diagnosis

Section 6.02 The Basic Question:

- (a) What Are The Root Causes of The Specific Occupational Shortages Identified in Report #1?**
- (b) Where To Look For Answers (and more questions):**
 - (i) Employer HR policies and practices.** This means recruitment, supervision, and other factors affecting retention. Are employer HR policies and practices responsible for the shortages? If so, then specifically how? What is the direct causal linkage between employer HR policies and difficulties of recruitment and/or retention?
 - (ii) Education and Training Capacity and Student Completion/Placement Issues.** Are there deficiencies with respect to educational and/or training strategies? Is there insufficient educational/training capacity? Are curricula properly designed? So they empower students and/or trainees with the proper attitudes, knowledge, and skill sets? Do they fit logical career ladders? Are dropout, persistence, and program completion practices out of line? If so why?
 - (iii) The “Pipeline”:** This concerns student and/or worker career awareness, attitudes, preparation, and access to educational and/or training. Are young people and mature adults insufficiently aware of the career opportunities in the shortage occupations? Do they or those who influence them have positive or negative attitudes toward these occupations? Are schools providing and/or assisting student and/or workers in getting the necessary prerequisite skills to enter training and find employment in the shortage occupations?
 - (iv) Leakage Issues:** Is there a net migration out of this EGR of education/training completers and/or workers in the shortage occupations or with the critical skill sets? What is the magnitude of this net flow? What causes it?



- (v) **Wage Rates and Benefits.** Are compensation levels in this EGR's industries/clusters competitive with those prevailing elsewhere? If not, then why not?
- (c) Addressing These Questions:
 - (i) **Mining The Literature**
 - (ii) **Mobilizing and Analyzing Secondary Data**
 - (iii) **Developing and Sifting Primary Data**
 - 1) *What is the present and anticipated future “output” of education and training institutions that prepare entrants into the critical occupations? Needed are data showing the following for each institution or organization offering such educational and/or training programs:*
 - a) *Academic and other requirements for entry into these programs.*
 - b) *Duration of the programs.*
 - c) *Cost of the programs.*
 - d) *Present and planned capacity for intake into the programs.*
 - e) *Present and anticipated actual intake into the programs.*
 - f) *Persistence rates and completion rates in these programs.*
 - g) *A breakdown of reasons for non-persistence and non-completion.*

Section 6.03 Writing the Report

- (a) Synthesizing the Research Results.
 - (i) **Drawing a Direct “Line of Sight” From the Symptoms (i.e., the identification of the shortage occupations and/or skill sets in key industries/clusters to the Root Causes.**
 - (ii) **Ranking the Root Causes and Their Impacts: For Each Root Cause**
 - 1) *Summarize evidence of how the Root Cause was identified.*
 - 2) *Rank its importance and relative contribution to the projected short and long-term shortages*
 - 3) *Provide a qualitative assessment of how sensitive projected future occupational and/or skill shortages are to changes in each Root Cause.*
 - 4) *Estimate the quantitative response of projected future shortages to specific levels of reduction in each Root Cause.*
- (b) Validating Those Results
 - (i) **Getting Regional Coalition and Industry Partner Input**
 - (ii) **Documenting Regional Coalition and Industry Partner Engagement**
- (c) Outlining the Report
- (d) The First Draft
- (e) Feedback and Consortium Endorsement
- (f) The Final Draft and its Submission



Chapter VII. Report #3: Regional Solutions Report

Section 7.01 The Nature of This Report: Prescription

Section 7.02 The Basic Question

(a) What actions will our EGR take to create solutions that attack the root causes enumerated in Report #2?

(b) How To Generate Meaningful Answers

- (i) Best and promising practices** – how can the EGR take advantage of, emulate, capitalize on, or otherwise benefit from solutions to similar root causes that have already worked or are underway for other regions/institutions – or their own? There's no need to reinvent the wheel.
- (ii) Focus groups and consultation** – It is key here to convene multiple groups who have a stake in devising solutions to workforce shortages, including the industry contacts nurtured by the previous research phases, training providers, local economic development, etc. Every group among these can then have the opportunity to examine the feasibility and possible practical dimensions of proposed solutions from all angles.
- (iii) Consortium participation and buy-in** – It will take active planning from the Consortium to put together the ultimate package of solutions for each EGR. It will be up to each Consortium to choose which solutions to implement and who will be responsible for this implementation. It therefore falls to the Consortium to create and approve detailed action plans based on the proposed solutions.

Section 7.03 Writing the Report

(a) Synthesizing Research Results

(i) "Line of Sight" –Drawing a clear line from the symptoms of workforce shortages to the root causes in Report #2 and the solutions designed *specifically to address each of those root causes*.

(ii) Linking Solutions to Root Causes

- 1) *Indicate with Root Cause(s) are specifically linked to each of the solutions.*
- 2) *Rank solutions in the order of importance already established for the Root Causes.*
- 3) *Describe the nature and quantitative contribution of each solution to reducing shortages.*
- 4) *How is the solution linked to the response of labor supply/demand to the Root Cause(s)?*

(iii) Validating Results

- 1) *Coalition Approval and Regional Partner buy-in*
- 2) *Documenting Coalition approval and involvement by outside groups in planned solutions.*

(b) Action Planning

(i) Who will do what? Delegation of responsibility to Consortium members, WIB staff, and outside agencies

- 1) *Outside agency participation – for each solution, document the nature of agency's contribution to solution and the extent of outside agency's involvement, inc. timeline.*



- (ii) **Results – estimating the quantitative and qualitative contributions of planned activities to short-term and long-term shortages.**
- (iii) **Existing resource allocation – detailing the funding and other resources to be used for each solution from existing sources (i.e. not from grants to be awarded through SSI).**
 - 1) *Public funds.*
 - 2) *Private funds and in-kind contribution of resources or time.*
- (iv) **Timeline**
 - 1) *Practical, “do-able” deadlines*
 - 2) *Coherent work flow for solutions activities*
 - 3) *Resource/funding breakdown for timeline steps*
 - 4) *Alignment with requirements and deadlines for SSI*
- (v) **Sustainability**
 - 1) *Developing tracking measures*
 - a) *Measures aligned with SSI requirements*
 - b) *Other appropriate metrics and guideposts*
- (c) **Funding Request**
 - (i) **Determining and justifying appropriate funding requests**
 - 1) *Applying “line of sight” to justification*
 - (ii) **Detailed listing of funds required**
 - 1) *Requested SSI funds*
 - 2) *Leveraged existing resources*
 - (iii) **Determining and requesting one-time funds vs. recurring funds**
- (d) **Outlining the Report**
- (e) **The First Draft**
- (f) **Feedback and Consortium Endorsement**
- (g) **The Final Draft and its Submission**